

REMARKS

By way of the present response, claims 1, 8 and 9 have been amended. Claims 1, 2 and 4-9 currently are pending. Reconsideration and allowance of all pending claims is respectfully requested.

The most recent Office Action includes a rejection of claims 1-2 and 5-9 under 25 U.S.C. 102(e) as allegedly being anticipated by Sawada (U.S. Patent No. 6,181,437). However, it is respectfully submitted that amended claims 1, 8 and 9 are not anticipated by Sawada, for the following reasons:

Amended claim 1 recites, among other things, that after a line image region is extracted and converted to *vector data*, a second converter detects a side where a target pixel in pixels exists relative to the line image region defined by the *vector data*. The second converter then converts a value of the bit map data of the target pixel according to a value of the input bit map data around the line image region. Support for the amended subject matter is found throughout the original specification, for example, starting at line 11 of page 6 and in Figures 3-11. It is respectfully submitted that the Sawada patent does not describe the above features in combination with the other features set forth in claim 1. The claim 1 combination also addresses a number of problems not discussed in the Sawada patent, such as avoiding position shifts when reproducing an image in instances where a background of the line image region has different colors between the two sides (e.g., see page 10, line 24 to page 11, line 3).

For instance, while the Sawada patent describes extracting a line image region for correction of jags in edges, Sawada does not describe converting the line image region to vector data as claimed. Applicant notes the Examiner's allegation in section 2(b) of the Office Action, that the Sawada patent shows vector data in Figure 5 because magnitudes of image data, which were captured and converted into binary image data, are presented in horizontal and vertical directions. It is respectfully submitted, however, that the line images shown in Figure 5 do not represent a line image region in input bit map data which has been converted to vector data (e.g., compare the vector data as represented in Applicant's Table 1 on page 8 with the detected line images shown in Figure 5 of the Sawada patent).

Additionally, Figure 12 of the Sawada patent shows a circuit 15 that detects an isolated pixel and another circuit 18 that corrects the jag by converting the density of the isolated pixel to zero. Thus, the Sawada system simply sets the density of an isolated pixel to zero. Hence, the position shift of the background is not considered. In other words, while Sawada detects an isolated point, Sawada does not disclose the claimed feature of detecting a side where a target pixel in pixels (in correspondence to the isolated point of Sawada) exists relative to the line image region defined by the vector data and converting a value of the bit map data of the target pixel according to a value of the input bit map data around the line image region of the detected side.

For at least these reasons, the combination of features set forth in independent claim 1 is not anticipated by Sawada.

Similar distinctions are set forth in independent amended claims 8 and 9. For instance, claims 8 and 9 each recite, among other features, a step of extracting a line image region in input bit map image data and *converting the line image to vector data*. As pointed out above, the Sawada patent is silent with respect to converting line image to vector data as claimed. In addition, claims 8 and 9 recite *inter alia* the steps of *detecting a side where a target pixel in pixels exists relative to the line image region defined by the vector data* and converting a value of the bit map data of the target pixel according to a value of the input bit map data around the line image region of the detected side. As pointed out above, the Sawada patent also is silent with regard to this feature. Hence, independent claims 8 and 9 also recited patentably distinct subject matter not described in the Sawada patent. As such, claims 8 and 9 are considered patentable.

Claims 2, 3, and 5-7 depend from independent claim 1, and are therefore allowable for at least the above reasons, and further for the additional features recited.

The Office Action also includes and a rejection of claim 4 under 35 U.S.C. 103 as allegedly being unpatentable over Sawada in view of Takakura et al. (U.S. Patent No. 4,878,178). However, claim 4 depends from amended claim 1, which is allowable for reasons pointed out above. Furthermore, it is respectfully submitted

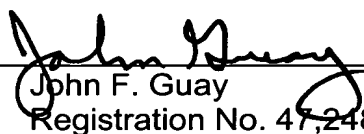
that the Takakura et al. patent does not remedy the shortcomings noted above with respect to the Sawada patent. Hence, claim 4 is considered allowable.

Based on the foregoing, it is believed that all rejections raised in the Office Action have been addressed and that the application is condition for allowance. Prompt notification of the same is respectfully requested.

Respectfully submitted,

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